

AMENDMENT

Amendments to the Specification

Please replace pages 77, 78 and 79 with the following:

TABLE 8A. INHIBITION OF *P. AERUGINOSA* PAO1 AND *E. COLI* DH5 α BY CAP18 PEPTIDES¹

Peptide	Sequence	Ionic Strength (mM)	<i>P. aeruginosa</i> PAO1		<i>E. coli</i> DH5 α	
			$\mu\text{g/ml} \pm \text{sem}$	EC_{50} $\mu\text{M} \pm \text{sem}$	$\mu\text{g/ml} \pm \text{sem}$	EC_{50} $\mu\text{M} \pm \text{sem}$
CAP18	GLRKRLRKFRNKIKEKLLKKIG	25	0.98 \pm 0.24	0.22 \pm 0.05	0.69 \pm 0.08	0.15 \pm 0.02
	<u>QKIQGLLPKLA</u> PRTDY (SEQ ID NO:18)	175	0.50 \pm 0.10	0.11 \pm 0.02		
CAP18-21a	GLRKRLRKFRNKIKEKLLKKIG	25	0.58 \pm 0.09	0.22 \pm 0.03	0.48 \pm 0.03	0.19 \pm 0.01
	(SEQ ID NO:19)	175	0.54 \pm 0.10	0.21 \pm 0.04		
CAP18-18	KRLRKFRNKIKEKLLKKIG (SEQ ID NO:20)	25	1.05 \pm 0.37	0.46 \pm 0.16	0.47 \pm 0.06	0.20 \pm 0.03
		175	1.59 \pm 0.29	0.69 \pm 0.13		
CAP18-22	RKRLRKFRNKIKEKLLKKIGQKI (SEQ ID NO:21)	25	1.38 \pm 0.49	0.49 \pm 0.17	1.47 \pm 0.44	0.52 \pm 0.16
		175	0.88 \pm 0.12	0.31 \pm 0.04		
CAP18-19	LKFRNKIKEKLLKKIGQKI (SEQ ID NO:22)	25	1.65 \pm 0.27	0.70 \pm 0.11	2.27 \pm 0.30	0.96 \pm 0.13
		175	3.06 \pm 0.36	1.29 \pm 0.15		
CAP18-21b	LKFRNKIKEKLLKKIGQKIQ (SEQ ID NO:23)	25	1.83 \pm 0.51	0.72 \pm 0.20	2.99 \pm 0.33	1.17 \pm 0.13
		175	3.45 \pm 0.02	1.35 \pm 0.01		
CAP18-15a	RKFRNKIKEKLLKKIG (SEQ ID NO:24)	25	1.54 \pm 0.43	0.81 \pm 0.23	0.46 \pm 0.12	0.24 \pm 0.07
		175	>20	>10		
CAP18-15b	KIKEKLLKKIGQKIQ (SEQ ID NO:25)	25	10.3 \pm 0.3	5.92 \pm 0.20	7.23 \pm 1.81	4.15 \pm 1.04
		175	>80	>45		
CAP18-17	KIKEKLLKKIGQKIQGLL (SEQ ID NO:26)	25	2.33 \pm 0.35	1.18 \pm 0.18	2.51 \pm 0.38	1.27 \pm 0.20
		175	>25	>13		

¹ EC₅₀s were measured in the luminescence assay, performed at 25 mM and 175 mM ionic strength with PAO1 and 25mM with DH5 α . Data are average \pm Sem.

TABLE 8B. INHIBITION OF *P. AERUGINOSA* PAO1 BY SMAP29 PEPTIDES ²

Peptide	Sequence	Ionic Strength (mM)	EC ₅₀ <i>P. aeruginosa</i> PAO1		
			μg/ml ± sem	μM ± sem	N
SMAP29	RGLRRLGRKIAHGVKKYGPT	25	0.17 ± 0.02	0.05 ± 0.01	(8)
	VLRIIRIAG (SEQ ID NO:2)	175	0.21 ± 0.03	0.06 ± 0.01	(7)
SMAP29-18	RGLRRLGRKIAHGVKKYG	25	0.43 ± 0.08	0.21 ± 0.04	(7)
	(SEQ ID NO:5)	175	0.76 ± 0.09	0.37 ± 0.05	(7)
SMAP29-21	KIAHGVKKYGPTVLRIIRIAG	25	1.09 ± 0.16	0.48 ± 0.07	(5)
	(SEQ ID NO:3)	175	16.6 ± 1.41	7.25 ± 0.62	(3)
SMAP29-20	LGRKIAHGVKKYGPTVLRII	25	0.83 ± 0.10	0.37 ± 0.05	(5)
	(SEQ ID NO:4)	175	27.3 ± 3.97	12.3 ± 1.79	(5)
SMAP29-18AA	RGLRALGRKIAHGVKAYG	25	0.62 ± 0.13	0.32 ± 0.07	(3)
	(SEQ ID NO:29)	175	7.85 ± 1.16	4.08 ± 0.87	(3)
SMAP29X	KNLRRIIRKIIHIKKYGPTILR	25	2.74 ± 0.65	0.78 ± 0.19	(4)
	IIRIIG-NH2 (SEQ ID NO:28)	175	4.51 ± 0.24	1.29 ± 0.07	(3)
SMAP29X-18A	KNLRRIIRKIIHIKKYG-NH2	25	0.22 ± 0.00	0.10 ± 0.00	(3)
	(SEQ ID NO:1)	175	0.49 ± 0.02	0.22 ± 0.01	(3)
SMAP29X-18B	KNIRRIIRKIIHIKKYG-NH2	25	0.16 ± 0.01	0.07 ± 0.00	(3)
	(SEQ ID NO:6)	175	0.54 ± 0.05	0.24 ± 0.02	(3)
SMAP29X-18C	KNIRRIIRKIIHIKKYG (SEQ ID NO:7)	25	0.24 ± 0.01	0.11 ± 0.00	(3)
		175	0.61 ± 0.12	0.27 ± 0.05	(3)
SMAP29X-18D	KNLRRIIRKIIHIKKYG (SEQ ID NO:8)	25	0.29 ± 0.01	0.13 ± 0.01	(3)
		175	0.58 ± 0.05	0.26 ± 0.02	(3)
SMAP29X-16A	NLRRIIRKIIHIKKY (SEQ ID NO:9)	25	0.90 ± 0.54	0.43 ± 0.26	(3)
		175	1.78 ± 0.26	0.86 ± 0.12	(3)
SMAP29X-16B	NLRRIIRKIIHIKKY-NH2 (SEQ ID NO:30)	25	0.75	0.36	(1)
		175	3.78	1.82	(1)
SMAP29X-16C	NIRRIIRKIIHIKKY-NH2 (SEQ ID NO:31)	25	0.65	0.31	(1)
		175	2.21	1.07	(1)
SMAP29X-16D	NIRRIIRKIIHIKKY (SEQ ID NO:10)	25	0.70 ± 0.36	0.34 ± 0.17	(3)
		175	3.64 ± 1.75	1.75 ± 0.84	(3)
SMAP29X-14A	LRRIIRKIIHIKK-NH2 (SEQ ID NO:11)	25	0.23 ± 0.03	0.13 ± 0.02	(3)
		175	1.59 ± 0.22	0.88 ± 0.12	(3)
SMAP29X-14B	LRRIIRKIIHIKK (SEQ ID NO:12)	25	0.55 ± 0.03	0.30 ± 0.02	(3)
		175	5.55 ± 0.42	3.08 ± 0.23	(3)
SMAP29X-14C	IRRIIRKIIHIKK-NH2 (SEQ ID NO:13)	25	0.29 ± 0.04	0.16 ± 0.02	(3)
		175	1.21 ± 0.05	0.67 ± 0.03	(3)
SMAP29X-14D	IRRIIRKIIHIKK (SEQ ID NO:14)	25	0.65 ± 0.06	0.36 ± 0.03	(3)
		175	7.11 ± 2.40	3.95 ± 1.34	(3)

² EC₅₀S were measured in the luminescence assay, performed at 25 mM and 175 mM ionic strength. Data are average ± sem.

Peptide	Sequence	Ionic Strength (mM)	EC ₅₀ <i>P. aeruginosa</i> PAO1		
			μg/ml ± sem	μM ± sem	N
SMAP29X-13A	LRRIIRKIIHIIK-NH2 (SEQ ID NO:15)	25	0.27 ± 0.03	0.16 ± 0.02	(3)
SMAP29X-13B	RRIIRKIIHIIKK-NH2 (SEQ ID NO:16)	25	0.22 ± 0.02	0.13 ± 0.01	(3)
SMAP29X-12	RRIIRKIIHIIK-NH2 (SEQ ID NO:17)	175	1.51 ± 0.09	0.90 ± 0.06	(3)
SMAP29X-11A	RRIIRKIIHII-NH2 (SEQ ID NO:32)	25	0.38 ± 0.04	0.27 ± 0.03	(3)
SMAP29X-11B	RIIRKIIHIIK-NH2 (SEQ ID NO:33)	175	4.92 ± 0.43	3.44 ± 0.30	(3)
SMAP29X-10	RIIRKIIHII-NH2 (SEQ ID NO:34)	25	0.46 ± 0.02	0.33 ± 0.01	(3)
		175	10.42 ± 0.26	7.43 ± 0.19	(3)
		25	0.51 ± 0.00	0.40 ± 0.00	(3)
		175	18.67 ± 0.97	14.66 ± 0.77	(3)